518,086

(12) INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(19) World Intellectual Property Organization International Bureau



(43) International Publication Date 8 January 2004 (08.01,2004)

PCT

(10) International Publication Number WO 2004/002907 A1

(51) International Patent Classification⁷: 37/014

C03B 8/04,

(21) International Application Number:

PCT/FI2003/000522

(22) International Filing Date: 27 June 2003 (27.06.2003)

(25) Filing Language:

Finnish

(26) Publication Language:

English

(30) Priority Data: 20021269

28 June 2002 (28.06.2002) F

- (71) Applicant (for all designated States except US): LIEKKI OY [FI/FI]; Sorronrinne 9, FIN-08500 Lohja AS (FI).
- (72) Inventors; and
- (75) Inventors/Applicants (for US only): JANKA, Kauko [FI/FI]; Maisterinkatu 12, FIN-33720 Tampere (FI). RA-JALA, Markku [FI/FI]; Klaavuntie 9 A 3, FIN-00910 Helsinki (FI).
- (74) Agent: TAMPEREEN PATENTTITOIMISTO OY; Hermiankatu 12 B, FIN-33720 Tampere (FI).

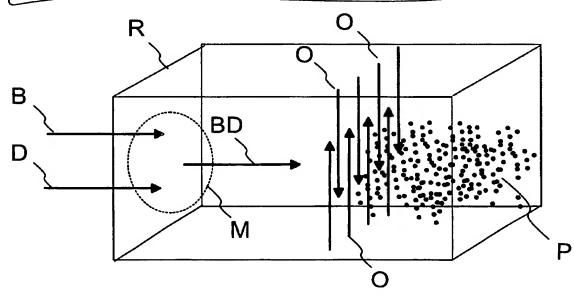
- (81) Designated States (national): AE, AG, AL, AM, AT (utility model), AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ (utility model), CZ, DE (utility model), DE, DK (utility model), DK, DM, DZ, EC, EE (utility model), EE, ES, FI (utility model), FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK (utility model), SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW.
- (84) Designated States (regional): ARIPO patent (GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European patent (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR), OAPI patent (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

Published:

with international search report

For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.

(54) Title/ A METHOD FOR THE PREPARATION OF DOPED OXIDE MATERIAL



(57) Abstract: The invention relates to a method for preparing doped oxide material, in which method substantially all the reactants (B, D) forming the oxide material are brought to a vaporous reduced form in the gas phase and after this to react with each other in order to form oxide particles (P). According to the invention, said reactants (B, D) in vaporous and reduced form are mixed together to a gas flow (BD) of reactants, which gas flow (BD) is further condensated fast in such a manner that substantially all the component parts of the reactants (B, D) reach a supersaturated state substantially simultaneously by forming oxide particles (P) in such a manner that there is no time to reach chemical phase balances.